



MISSISSIPPI STATE DEPARTMENT OF HEALTH

**This is an official  
MS Health Alert Network (HAN) Advisory**

**MESSAGE ID:** MSHAN-20150123-00307-ADV (Health Advisory)  
**RECIPIENTS:** All Physicians, Hospitals, and Health care Providers - Statewide  
**DATE:** January 23, 2015

***SUBJECT: U.S. Multi-state Measles Outbreak, December 2014-January 2015***

Dear Colleagues:

The Centers for Disease Control and Prevention is recommending that U.S. healthcare providers ensure all that patients are up to date on MMR (Measles, Mumps, and Rubella) vaccination. CDC is in the midst of an ongoing multi-state measles outbreak investigation linked to the Disneyland Resort Theme Parks in California. Thus far 51 U.S. cases and one case from Mexico have been identified, with 15% requiring hospitalization. Cases of secondary transmission have been reported by the California Department of Health. Among the 52 outbreak associated cases, 55% were unvaccinated, 31% had unknown vaccination status and 12% were vaccinated. Measles is still endemic in several parts of the world, and outbreaks in the U.S. do occur when unvaccinated groups are exposed to an imported case of measles. The current outbreak highlights the risk of imported cases and the need for continued high measles vaccine coverage.

**There are no measles cases associated with this outbreak in Mississippi; in fact there have been no reported cases of measles in Mississippi since 1992.**

The Mississippi State Department of Health (MSDH) is asking providers to:

- Ensure that patients are up to date on measles vaccination, including patients who travel or plan to travel abroad (see additional details below);
- Consider the diagnosis of measles in patients presenting with fever, rash and clinically compatible symptoms (cough, coryza, and/or conjunctivitis);
- Notify the Mississippi State Department of Health (MSDH) Office of Epidemiology immediately at 601 576-7725 (601 576-7400 after hours) in the event of suspected measles. Measles is a Class I Reportable Condition, requiring immediate notification within 24 hours of first knowledge or suspicion.

Please see the attached information below for additional details.

Thomas Dobbs, MD, MPH  
State Epidemiologist  
Mississippi State Department of Health  
(601) 576-7725

570 East Woodrow Wilson • Post Office Box 1700 • Jackson, MS 39215-1700  
601-576-8090 • 1-866-HLTHY4U • [www.HealthyMS.com](http://www.HealthyMS.com)

*Equal Opportunity in Employment/Services*

**This is an official**  
**CDC HEALTH ADVISORY**

Distributed via the CDC Health Alert Network  
January 23, 2015, 14:00 ET (2:00 PM ET)  
CDCHAN-00376

## **U.S. Multi-state Measles Outbreak, December 2014-January 2015**

### **Summary**

*The Centers for Disease Control and Prevention (CDC) and State Health Departments are investigating a multi-state outbreak of measles associated with travel to Disneyland Resort Theme Parks (which includes Disneyland and Disney California Adventure). The purpose of this HAN Advisory is to notify public health departments and healthcare facilities about this measles outbreak and to provide guidance to healthcare providers. Healthcare providers should ensure that all of their patients are current on MMR (measles, mumps, and rubella) vaccine. They should consider measles in the differential diagnosis of patients with fever and rash and ask patients about recent international travel or travel to domestic venues frequented by international travelers. They should also ask patients about their history of measles exposures in their community. Please disseminate this information to healthcare providers in hospitals and emergency rooms, to primary care providers, and to microbiology laboratories.*

### **Background**

Measles is a highly contagious, acute viral illness. It begins with a prodrome of fever, cough, coryza (runny nose), conjunctivitis (pink eye), lasting 2-4 days prior to rash onset. Measles can cause severe health complications, including pneumonia, encephalitis, and death. Measles is transmitted by contact with an infected person through coughing and sneezing; infected people are contagious from 4 days before their rash starts through 4 days afterwards. After an infected person leaves a location, the virus remains viable for up to 2 hours on surfaces and in the air.

The United States is experiencing a large multi-state measles outbreak that started in California in December 2014 and has spread to six additional states and Mexico. The initial confirmed case-patients reported visiting Disneyland Resort Theme Parks in Orange County, CA, from December 17 through December 20, 2014. From December 28, 2014, through January 21, 2015, 51 confirmed cases of measles linked to this outbreak have been reported to CDC, 42 from California and 9 from six other states (3 in UT, 2 in WA, 1 in OR, 1 in CO, 1 in NE, and 1 in AZ). In addition to the U.S. cases, one case was reported from Mexico in an unvaccinated child who visited Disneyland Resort Theme Parks on December 17 and December 20, 2014. At this time, no source case for the outbreak has been identified, but it is likely that a traveler (or more than one traveler) who was infected with measles overseas visited one or both of the Disney parks in December during their infectious period.

For cases with age reported, the age of case-patients range from 10 months to 57 years (median = 16.5 years). To date, 8 (15%) case-patients were hospitalized. Of the 52 outbreak-associated cases, 28 (55%) were unvaccinated, 17 (31%) had unknown vaccination status, and 6 (12%) were vaccinated. Of the 6 cases vaccinated, 2 had received 1 dose and 4 had received 2 or more doses. Among the 28 unvaccinated cases, 5 were under age for vaccination. Measles genotype information was available from 9 measles cases; all were genotype B3 and all sequences linked to this outbreak are identical. The sequences are also identical to the genotype B3 virus that caused a large outbreak in the Philippines in 2014. During the last 6 months, identical genotype B3 viruses were also detected in at least 14 countries and at least 6 U.S. states, not including those linked to the current outbreak.

Measles was declared eliminated (i.e., interruption of year-round endemic transmission) in the United States in 2000, because of high population immunity achieved by high 2-dose measles vaccine coverage and a highly effective measles vaccine. However, measles is still endemic in many parts of the world, and outbreaks can occur in the U.S. when unvaccinated groups are exposed to imported measles virus. In 2014, nearly half of importations in the U.S. were linked to travel to the Philippines during the large

570 East Woodrow Wilson • Post Office Box 1700 • Jackson, MS 39215-1700  
601-576-8090 • 1-866-HLTHY4U • [www.HealthyMS.com](http://www.HealthyMS.com)

*Equal Opportunity in Employment/Services*

measles outbreak in that country. Disney and other theme parks are international attractions, and visitors come from many parts of the world, including locations where measles is endemic. The current multi-state outbreak underscores the ongoing risk of importation of measles, the need for high measles vaccine coverage, and the importance of a prompt and appropriate public health response to measles cases and outbreaks.

Because of the success of the measles vaccine program, most young physicians have never seen a case of measles and may not take a detailed history of travel or potential exposure and initially may not consider the diagnosis in a clinically compatible case.

### **Recommendations for Health Care Providers**

- Ensure all patients are up to date on MMR vaccine\* and other vaccines.
- For those who travel abroad, CDC recommends that all U.S. residents older than 6 months be protected from measles and receive MMR vaccine, if needed, prior to departure.
  - Infants 6 through 11 months old should receive 1 dose of MMR vaccine before departure.†
  - Children 12 months of age or older should have documentation of 2 doses of MMR vaccine (separated by at least 28 days).
  - Teenagers and adults without evidence of measles immunity\*\* should have documentation of 2 appropriately spaced doses of MMR vaccine.
- Consider measles as a diagnosis in anyone with a febrile rash illness and clinically compatible symptoms (cough, coryza, and/or conjunctivitis) who has recently traveled abroad or who has had contact with someone with a febrile rash illness. Immunocompromised patients may not exhibit rash or may exhibit an atypical rash. The incubation period for measles from exposure to fever is usually about 10 days (range, 7 to 12 days) and from exposure to rash onset is usually 14 days (range, 7 to 21 days).
- Isolate suspect measles case-patients and immediately report cases to local health departments to ensure a prompt public health response.
- Obtain specimens for testing, including viral specimens for confirmation and genotyping. Contact the local health department for assistance with submitting specimens for testing.

\* Children 1 through 12 years of age may receive MMRV vaccine for protection against measles, mumps, rubella, and varicella.

† Infants who receive a dose of MMR vaccine before their first birthday should receive 2 more doses of MMR vaccine, the first of which should be administered when the child is 12 through 15 months of age and the second at least 28 days later.

\*\* One of the following is considered evidence of measles immunity for international travelers: 1) birth before 1957, 2) documented administration of 2 doses of live measles virus vaccine (MMR, MMRV, or measles vaccines), 3) laboratory (serologic) proof of immunity or laboratory confirmation of disease.

### **For more information:**

- CDC. Measles—United States, January 1–May 23, 2014. *MMWR*. 2014;63:496-499  
<http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6322a4.htm>
- CDC's Measles (Rubeola) website.  
<http://www.cdc.gov/measles/index.html>

- CDC's Measles Vaccination website.  
<http://www.cdc.gov/measles/vaccination.html>
- CDC. Notes from the Field: Measles Transmission at a Domestic Terminal Gate in an International Airport — United States, January 2014. *MMWR*. 2014; 63):1211-1211  
<http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6350a9.htm>
- Medscape Today: CDC Expert Commentary: Measles: What You Might Not Know Recognizing, diagnosing, and preventing measles (running time: 5:20 mins).  
<http://www.medscape.com/viewarticle/741206>
- CDC. Prevention of Measles, Rubella, Congenital Rubella Syndrome, and Mumps, 2013: Summary Recommendations of the Advisory Committee on Immunization Practices (ACIP) <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr6204a1.htm>.
- CDC. Manual for the Surveillance of Vaccine-Preventable Diseases; Chapter 7: Measles  
<http://www.cdc.gov/vaccines/pubs/surv-manual/chpt07-measles.html>

*The Centers for Disease Control and Prevention (CDC) protects people's health and safety by preventing and controlling diseases and injuries; enhances health decisions by providing credible information on critical health issues; and promotes healthy living through strong partnerships with local, national, and international organizations.*

---

**Categories of Health Alert Network messages:**

<b>Health Alert</b>	Requires immediate action or attention; highest level of importance
<b>Health Advisory</b>	May not require immediate action; provides important information for a specific incident or situation
<b>Health Update</b>	Unlikely to require immediate action; provides updated information regarding an incident or situation
<b>HAN Info Service</b>	Does not require immediate action; provides general public health information

## ***Alerting Message Specification Settings***

<b>Originating Agency:</b>	Mississippi State Department of Health
<b>Alerting Program:</b>	MS Health Alert Network (MS HAN)
<b>Message Identifier:</b>	MSHAN-2015012300376-ADV
<b>Program (HAN) Type:</b>	Health Advisory
<b>Status (Type):</b>	Actual ()
<b>Message Type:</b>	Alert
<b>Reference:</b>	MSHAN-00376
<b>Severity:</b>	Unknown
<b>Acknowledgement:</b>	No
<b>Sensitive:</b>	Not Sensitive
<b>Message Expiration:</b>	Undetermined
<b>Urgency:</b>	Undetermined
<b>Delivery Time:</b>	600 minutes

## **Definition of Alerting Vocabulary and Message Specification Settings**

<b>Originating Agency:</b>	A unique identifier for the agency originating the alert.
<b>Alerting Program:</b>	The program sending the alert or engaging in alerts and communications using PHIN Communication and Alerting (PCA) as a vehicle for their delivery.
<b>Message Identifier:</b>	A unique alert identifier that is generated upon alert activation (MSHAN-yyymmdd-hhmm-TTT ( <b>ALT=Health Alert</b> , <b>ADV=Health Advisory</b> , <b>UPD=Health Update</b> , <b>MSG/INFO=Message/Info Service</b> )).
<b>Program (HAN) Type:</b>	Categories of Health Alert Messages.
<b>Health Alert:</b>	Conveys the highest level of importance; warrants immediate action or attention.
<b>Health Advisory:</b>	Provides important information for a specific incident or situation; may not require immediate action.
<b>Health Update:</b>	Provides updated information regarding an incident or situation; unlikely to require immediate action.
<b>Health Info Service:</b>	Provides Message / Notification of general public health information; unlikely to require immediate action.
<b>Status (Type):</b>	
Actual:	Communication or alert refers to a live event
Exercise:	Designated recipients must respond to the communication or alert
Test:	Communication or alert is related to a technical, system test and should be disregarded
<b>Message Type:</b>	
Alert:	Indicates an original Alert
Update:	Indicates prior alert has been Updated and/or superseded
Cancel:	Indicates prior alert has been cancelled
Error:	Indicates prior alert has been retracted

**Reference:** For a communication or alert with a Message Type of “Update” or “Cancel”, this attribute contains the unique Message Identifier of the original communication or alert being updated or cancelled. “n/a” = Not Applicable.

**Severity:**

Extreme:	Extraordinary threat to life or property
Severe:	Significant threat to life or property
Moderate:	Possible threat to life or property
Minor:	Minimal threat to life or property
Unknown:	Unknown threat to life or property

**Acknowledgement:** Indicates whether an acknowledgement on the part of the recipient is required to confirm that the alert was received, and the timeframe in which a response is required (Yes or No).

**Sensitive:**

Sensitive:	Indicates the alert contains sensitive content
Not Sensitive:	Indicates non-sensitive content

**Message Expiration:** Undetermined.

**Urgency:** Undetermined. Responsive action should be taken immediately.

**Delivery Time:** Indicates the timeframe for delivery of the alert (15, 60, 1440, 4320 minutes (.25, 1, 24, 72 hours)).